CLAIMS:

1. An electrochromic display comprising

electrochrome pixels comprising at least a first electrochrome material and a second electrochrome material between two electrodes,

the first electrochrome material changing from a transparent state to a color absorbing state for at least partly absorbing a first color when a pixel voltage across the electrochrome pixel has a first value, the first electrochrome material changing from the color absorbing state to the transparent state when the pixel voltage has a second value having a polarity opposite to the first value, and

the second electrochrome material changing from a transparent state to a color absorbing state for at least partly absorbing a second color different than the first color when the pixel voltage has a third value having an absolute value being smaller than an absolute value of the first value, the second electro-chrome material changing from the color absorbing state to the transparent state when the pixel voltage has a fourth value having a polarity opposite to the third value, an absolute value of the fourth value being smaller than an absolute value of the second value.

2. An electrochromic display as claimed in claim 1, wherein the first electro-chrome material and the second electrochrome material are two separate layers.

3. An electrochromic display as claimed in claim 1, wherein the first electro-chrome material and the second electrochrome material are mixed in a one layer mixture.

4. An electrochromic display as claimed in claims 2 or 3, wherein one of the electrodes has a nano-porous surface being covered by the one layer mixture.

5. An electrochromic display as claimed in claim 1, wherein the electrochrome pixels comprise a color filter for filtering a third color being different than the first color and the second color.

6. An electrochromic display as claimed in claim 1, wherein the electrochrome pixels further comprise a third electrochrome material changing from a transparent state to a color absorbing state for at least partly absorbing a third color different than the first and the second color when the pixel voltage has a fifth value having an absolute value being smaller than an absolute value of the third value, the third electro-chrome material changing from the color absorbing state to the transparent state when the pixel voltage has a sixth value having a polarity opposite to the third value, an absolute value of the sixth value being smaller than an absolute value of the fourth value.

7. An electrochromic display as claimed in claim 6, wherein the first, second a third electrochrome material in their color absorbing state appear cyano, magenta, and yellow, respectively.

8. A driver circuit for driving an electrochrome pixel of the electrochromic display as claimed in claim 1, the driver circuit comprising means for applying the pixel voltage across the electrochrome pixel successively as follows:

(i) the pixel voltage has an absolute value and a polarity for changing towards the transparent state of both the first electrochrome material and the second electrochrome material,

(ii) the pixel voltage has an absolute value and a polarity for changing the transparent state into the color absorbing state of both the first electrochrome material and the second electrochrome material, and is applied as long as required to obtain a desired amount of absorption of the first electrochrome material,

(iii) the pixel voltage has an absolute value and a polarity for changing towards the transparent state of the second electrochrome material, while the first electrochrome material is unaffected, and

(iv) the pixel voltage has an absolute value and a polarity for changing the transparent state of the second electrochrome material into the color absorbing state, while the first electrochrome material is unaffected, and is applied as long as required to obtain a desired amount of absorption of the second electrochrome material.

9. A driver circuit for driving an electrochrome pixel of the electrochromic display as claimed in claim 1, the driver circuit comprising means for applying the pixel voltage across the electrochrome pixel successively as follows:

(i) the pixel voltage has an absolute value and a polarity for changing towards the color absorbing state of both the first electrochrome material and the second electrochrome material,

(ii) the pixel voltage has an absolute value and a polarity for changing the color absorbing state into the transparent state of both the first electrochrome material and the second electrochrome material, and is applied as long as required to obtain a desired amount of absorption of the first electrochrome material,

(iii) the pixel voltage has an absolute value and a polarity for changing towards the color absorbing state of the second electrochrome material, while the first electrochrome material is unaffected, and

(iv) the pixel voltage has an absolute value and a polarity for changing the color absorbing state of the second electrochrome material into the transparent state, while the first electrochrome material is unaffected, and is applied as long as required to obtain a desired amount of absorption of the second electrochrome material.

10. A driver circuit for driving an electrochrome pixel of the electrochromic display as claimed in claim 1, the driver circuit comprising

a comparator for comparing a current amount of absorption of the first electrochrome material with a required amount of absorption required for successive information to be displayed,

means for applying the pixel voltage across the electrochrome pixel having an absolute value and a polarity for changing towards the transparent state of both the first electrochrome material and the second electrochrome material, when the required amount of absorption is lower than the current amount of absorption, or for applying the pixel voltage across the electrochrome pixel having an absolute value and a polarity for changing towards the color absorbing state of both the first electrochrome material and the second electrochrome material, when the required amount of absorption is higher than the current amount of absorption,

the comparator being adapted for comparing a current amount of absorption of the second electrochrome material with a required amount of absorption required for successive information to be displayed,

the means for applying the pixel voltage being adapted for supplying the pixel voltage across the electrochrome pixel having an absolute value and a polarity for changing towards the transparent state of the second electrochrome material while the first

electrochrome material is unaffected, when the required amount of absorption is lower than the current amount of absorption, or for applying the pixel voltage across the electrochrome pixel having an absolute value and a polarity for changing towards the color absorbing state of the second electrochrome material while the first electrochrome material is unaffected, when the required amount of absorption is higher than the current amount of absorption.

11. A display apparatus comprising the color electrochromic display as claimed in claim 1, and the driver circuit as claimed in any of the claim 8 to 10.

12. A method of driving an electrochrome pixel of the electrochromic display as claimed in claim 1, comprising

applying the pixel voltage across the electrochrome pixel successively as follows:

(i) the pixel voltage has an absolute value and a polarity for obtaining the transparent state of both the first electrochrome material and the second electrochrome material,

(ii) the pixel voltage has an absolute value and a polarity for changing the transparent state into the color absorbing state of both the first electrochrome material and the second electrochrome material, and is applied as long as required to obtain a desired amount of absorption of the first electrochrome material,

(iii) the pixel voltage has an absolute value an a polarity for obtaining the transparent state of the second electrochrome material, while the first electrochrome material is unaffected, and

(iv) the pixel voltage has an absolute value and a polarity for changing the transparent state of the second electrochrome material into the color absorbing state, while the first electrochrome material is unaffected, and is applied as long as required to obtain a desired amount of absorption of the second electrochrome material.

13. A method of driving an electrochrome pixel of the electrochromic display as claimed in claim 1, comprising

applying the pixel voltage across the electrochrome pixel successively as follows:

(i) the pixel voltage has an absolutê value and a polarity for obtaining the color absorbing state of both the first electrochrome material and the second electrochrome material,

(ii) the pixel voltage has an absolute value and a polarity for changing the color absorbing state into the transparent state of both the first electrochrome material and the second electrochrome material, and is applied as long as required to obtain a desired amount of absorption of the first electrochrome material,

(iii) the pixel voltage has an absolute value an a polarity for obtaining the color absorbing state of the second electrochrome material, while the first electrochrome material is unaffected, and

(iv) the pixel voltage has an absolute value and a polarity for changing the color absorbing state of the second electrochrome material into the transparent state, while the first electrochrome material is unaffected, and is applied as long as required to obtain a desired amount of absorption of the second electrochrome material.

14. A method of driving an electrochrome pixel of the electrochromic display as claimed in claim 1, comprising

comparing a current amount of absorption of the first electrochrome material with a required amount of absorption required in for successive information to be displayed,

applying the pixel voltage across the electrochrome pixel having an absolute value and a polarity for changing towards the transparent state of both the first electrochrome material and the second electrochrome material, when the required amount of absorption is lower than the current amount of absorption, or for applying the pixel voltage across the electrochrome pixel having an absolute value and a polarity for changing towards the color absorbing state of both the first electrochrome material and the second electrochrome material, when the required amount of absorption is higher than the current amount of absorption,

comparing a current amount of absorption of the second electrochrome material with a required amount of absorption required for successive information to be displayed, and

applying the pixel voltage being adapted for supplying the pixel voltage across the electrochrome pixel having an absolute value and a polarity for changing towards the transparent state of the second electrochrome material while the first electrochrome material is unaffected, when the required amount of absorption is lower than the current amount of

absorption, or for applying the pixel voltage across the electrochrome pixel having an absolute value and a polarity for changing towards the color absorbing state of the second electrochrome material while the first electrochrome material is unaffected, when the required amount of absorption is higher than the current amount of absorption.